

## ABSTRACT OF THE DISCLOSURE

A method for testing a semiconductor device with a multi-gigabit communications receiver includes combining a data output from a high-speed communications transmitter with a perturbation signal generated by automatic test equipment. The combined signal data signal including jitter and low voltage swings is input to the communications receiver port under test. The automatic test equipment determines the bit error rate of the parallel data output from the receiver port under test. This test method is appropriate for semiconductor devices with multiple transceiver ports.